### **GYTS COUNTRY REPORT**

### **SLOVENIA**

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## Introduction

Tobacco products have been in use for a long time but the side effects have been well known since 1960. The first study "British Doctors Study" was set up in 1951 and for the first time the association between smoking and mortality from lung cancer and ischaemic heart disease was found (1).

The burden of disease caused by tobacco use is 4.9 million deaths a year and is still rising, a figure expected to rise to 10 million death a year by 2030, 70% of them in developing countries (2).

For WHO's Europe Region Peto et all. estimated that each year tobacco use is responsible for more than 1,2 million death and 700 000 of them in the countries of Central and Eastern Europe (3).

The tobacco use is increasing in the developing countries and among children in the developed and in the developing countries.

The prevention of diseases associated with tobacco use is one of the priority health issues of WHO.

## Children and Tobacco

One in four of new smokers in the Netherlands were in the youngest age category 15 -19 years (4). Children are a vulnerable group concerning smoking and environmental tobacco smoke (ETS) exposure. Exposure begins early in life if a parent smokes or if the mother is exposed to ETS during pregnancy. Children's exposure to tobacco smoke may cause growth restriction, many respiratory health problems such as lower respiratory illness, asthma and reduced lung growth and functioning. The adverse effects may start in infancy, childhood and adolescence and may persist throughout life (5).

## Tobacco use in Slovenia and tobacco legislation

In Slovenia, according to a Public opinion surveys<sup>1</sup> the number of adult smokers are diminishing from 28,7% to 23,7% (from 34,7 to 22,7% in males and from 28 to 20,1% in females) from the survey in 1994-98 compared to 1999-2001(6).

Tobacco use among the youth according to the ESPAD data<sup>2</sup> increased from 16% in 1993-96 to 26% in 1997-2001 (in boys 16 to 25% and in girls 17 to 26%) (7).

Modern and restrictive legislation on Tobacco Use has been introduced in Slovenia in 1996: ban on tobacco vending machine, ban on tobacco advertising, ban on sponsorship by tobacco industry, health warnings on packets of tobacco products, prohibition of sale

<sup>&</sup>lt;sup>1</sup>Data for 1994: no definition or age group available Source: Public opinion survey
Data for 2001: definition – daily smokers; age: 25–64 years Source: Zakotnik-Mavcec, J. et al. Public opinion survey

<sup>&</sup>lt;sup>2</sup>Data for 1995: definition: lifetime use of cigarettes 40 times and more, age group: 15-16 years Source: The 1995 ESPAD Report Stockholm. The Swedish Council for Information on Alcohol and Other Drugs (CAN), 1997. http://www.can.se Data for 1999: definition: lifetime use of cigarettes 40 times and more, age group: 15-16 years Source: The 1999 ESPAD Report Stockholm. The Swedish Council for Information on Alcohol and Other Drugs (CAN), 2000. http://www.can.se

of tobacco products to persons under the age of 15, smoking restriction in public places and workplaces (8)

## GYTS- goals and objective

In 1999 the WHO in collaboration with US Centers for Disease Control and Prevention and UNICEF, began a project called the Global Youth Tobacco Survey (GYTS) to enhance tobacco surveillance related to young people in a global level.

The Ministry of Health of Republic Slovenia conducted the GYTS since there were no accurate or representative data on the prevalence of smoking among children and youth. The GYTS provides a mechanism by which countries can monitor tobacco use among young people and guide the implementation and evaluation of tobacco prevention and control programs.

The goals of GYTS, school-based tobacco survey focusing on adolescent age 13-15, are to:

- determinate the level of smoking cigarettes and other tobacco products in schoolchildren,
- estimate the age of initiation of cigarette use
- estimate the smoking cessation desire
- estimate schoolchildren exposure to environmental tobacco smoke (ETC),
- estimate knowledge of schoolchildren towards cigarette smoking
- estimate the role of media and advertising,
- estimate access to cigarettes and other tobacco products.

## Methods

# Sample description and study design

GYTS Slovenia 2003 is a school-based cross sectional survey. Data about schools and number of students by grade were obtained from Ministry of Education, Science and Sport. In Slovenia 448 primary schools containing 7<sup>th</sup> grade and 8<sup>th</sup> grade and 150 secondary schools 1<sup>st</sup> grade that contained 40 or more students were included in the sample frame.

A two-stage cluster sample design was used to produce a representative sample of students.

Schools were grouped in three strata

- 1) Schools in Capital town of Ljubljana
- 2) Schools in West regions of Slovenia (obalno-kraška, severno-primorska, gorenjska, kraško -notranjska and ljubljanska without schools in capitol city of Ljubljana and zasavsko-revirska)
- 3) Schools in East regions of Slovenia (dolenjska, celjska, koroška, mariborska, pomurska and posavska).

In the first stage schools were selected with probability proportional to school enrollment size. In total, 60 school were selected, 20 from each strata.

The second sampling stage consisted of a systematic equal probability sample, with the random start, of classes from each school that participated in the survey. All students in the selected classes were eligible to participate.

## The questionnaire

The questionnaire consisted of the «Core European questionnaire GYTS" and contained 90 multiple-choice questions and was translated to Slovene language.

Questionnaire gathered data on the following topics:

- prevalence of smoking cigarettes and other tobacco products
- environmental tobacco smoke (ETC)
- cessation of cigarette smoking
- access to cigarettes and other tobacco products
- knowledge and attitudes of young people towards cigarette smoking
- tobacco related school curriculum
- role of media and advertising on young people's of cigarettes

### **Data Collection**

A letter of invitation was sent to headmaster of each selected school inviting them to participate in the survey. Children's parents in the selected classes were informed by letter and were asked to allow their child to participate in the survey. Survey procedures were designed to protect the students' privacy by allowing for anonymous and voluntary participation. The trained field staff (1 school doctor, 6 school nurses, one health worker and three students) administrated the questionnaire in the classroom. Students recorded their responses directly on an answer sheet that could be scanned by a computer.

### Analysis

A weighting factor was applied to each student record to adjust for non-response and for the varying probabilities of selection. SUDAAN and EpiInfo were used to compute weighted estimates and 95% confidence intervals for the estimates. Statistical differences included in this report were determined by comparing the range of the 95% confidence intervals for the estimates. If the range for the 95%CI did not overlap then the difference was statistically significant.

## **Ethical Approval**

Ethical commission of Ministry of Health of Republic Slovenia approved the GYTS survey in Slovenia.

## **Results**

#### Response rate

For the GYTS Slovenia 2003, 4727 questionnaires were completed in 57 schools. For schools overall response was 95,0% (57 of the 60 sampled schools participated) and for students 89,1% (4727 of the 5307 sampled students completed usable questionnaires). Overall response rate was 84,6 %.

### Prevalence

Almost two-third (66,4%) of students had ever smoked cigarettes, and 26,2% initiated smoke before age 10 (TABLE 1A). Boys significantly more likely initiate to smoke than girls before age of 10.

Almost three in ten students currently smoke cigarettes (28,5%). Over one-fifth (21,2%) of current smokers used hand-rolled cigarettes, with boys significantly more likely than girls smoke hand-rolled cigarettes. Over 90% of current smokers used manufactured cigarettes.

Table 1A: Percent of students who smoke cigarettes, SLOVENIA, GYTS, 2002/03

Category	Ever Smoked	Age of Initiation <10,	Current Use	Current Cigarette	Smokers who Smoke:
Category	Cigarettes, Even One or Two Puffs	Ever Smoked Cigarettes	Cigarettes Total	Hand-rolled	Manufactured
	or I wo I alis	Cigarettes		cigarettes	cigarettes
<u>Total</u>	66.4 ( <u>+</u> 3.5)	26.2 ( <u>+</u> 2.6)	28.5 ( <u>+</u> 4.7)	21.2 ( <u>+</u> 5.6)	92.5 ( <u>+</u> 1.8)
<u>Sex</u>					
Boy	66.5 ( <u>+</u> 3.8)	29.9 ( <u>+</u> 3.2)	25.4 ( <u>+</u> 4.1)	29.3 ( <u>+</u> 6.8)	89.6 ( <u>+</u> 2.7)
Girl	65.7 ( <u>+</u> 4.6)	23.8 (± 2.6)	29.9 ( <u>+</u> 6.0)	14.3 ( <u>+</u> 4.7)	94.5 ( <u>+</u> 1.8)
Region					
Ljublijana	63.5 ( <u>+</u> 5.8)	26.4 ( <u>+</u> 2.6)	28.4 ( <u>+</u> 7.8)	25.2 ( <u>+</u> 9.4)	92.6 ( <u>+</u> 3.1 )
East	71.5 ( <u>+</u> 5.5)	26.6 ( <u>+</u> 4.4)	32.8 ( <u>+</u> 8.3)	18.7 ( <u>+</u> 9.1)	92.1 ( <u>+</u> 3.1)
West	61.1 ( <u>+</u> 5.6)	25.5 ( <u>+</u> 4.4)	22.9 ( <u>+</u> 5.9)	23.3 ( <u>+</u> 5.0)	93.4 ( <u>+</u> 1.5)

Table 1B: Percent of students who use other to bacco products, SLOVENIA , GYTS,  $2002 \slash\hspace{-0.05cm}/ 03$ 

Category		Current Use						
	Other Tobacco Products	Cigars	Chew, snuff, dip	Pipe	Any Current Tobacco Use – Cigarettes + Other			
<u>Total</u>	9.5 ( <u>+</u> 1.5)	7.7 ( <u>+</u> 1.3)	3.1 ( <u>+</u> 0.8)	2.1 (±0.6)	29.1 (±4.4)			
Sex								
Boy	11.6 ( <u>+</u> 2.0)	9.7 ( <u>+</u> 1.9)	3.5 (±1.3)	2.5 (±0.7)	27.1 (±3.7)			
Girl	6.7 ( <u>+</u> 1.5)	5.3 ( <u>+</u> 1.2)	2.0 ( <u>+</u> 0.8)	1.4 ( <u>+</u> 0.8)	29.3 ( <u>+</u> 5.9)			
Region								
Ljublijana	10.5 ( <u>+</u> 4.0)	8.0 ( <u>+</u> 3.5)	3.2 ( <u>+</u> 2.0)	3.2 ( <u>+</u> 2.2)	30.1 ( <u>+</u> 7.5)			
East	9.8 ( <u>+</u> 2.2)	8.7 ( <u>+</u> 2.1)	2.9 (±1.4)	1.9 ( <u>+</u> 0.8)	32.4 (±7.6)			
West	8.5 ( <u>+</u> 2.3)	6.1 ( <u>+</u> 1.7)	3.2 (±1.0)	1.9 ( <u>+</u> 0.7)	24.1 ( <u>+</u> 5.7)			

Almost one in ten of students use to smoke other tobacco products (9,5%), with boys significantly more likely than girls (TABLE 1B). Most of them smoke cigars (7,7%), with boys significantly more likely than girls and more in Ljubljana and East region than West. Students also use chew (3,1%), also more likely boys, and smoke tobacco in pipe (2,1%).

One seventh of current smokers (15%) always feel like having a cigarette first thing in the morning (TABLE 1C). Almost three in ten (27,3%) never-smokers indicate that are likely to initiate smoking during the next year; with girls (31,0%) significantly more likely than boys (23,2%).

Table 1C: Percent of students reporting smoking dependency and susceptibility, SLOVENIA, GYTS, 2002/03

Category	Percent of current smokers who always have or feel like having a cigarette first thing in the morning	Percent of never smokers likely to initiate smoking during the next year
Total	15.0 (±2.6)	27.3 (±2.9)
Sex		
Boy	17.9 (±3.2)	23.2 (±3.6)
Girl	13.7 (±3.0)	31.0 (±3.9)
Region		
Ljublijana	17.6 (±6.2)	29.3 (±4.4)
East	15.5( <u>+</u> 4.2)	29.2 ( <u>+</u> 4.5 <u>)</u>
West	12.2 ( <u>+</u> 1.9)	24.5 (±5.0)

# School curriculum

During the past school year, 60,5% of students had class where the danger of smoking was taught; less than half (45,5%) had classes that discussed reasons why people their age smoke and less then half (46,5%) had classes that thought about the effects of smoking (TABLE 2). Ljubljana had significantly lower level of students (43,3%) have been thought about tobacco than the other regions.

Table 2: School Curriculum, SLOVENIA, GYTS, 2002/03

Category	During past school year, percent had class where taught dangers of smoking	During past school year, percent had class where discussed reasons why people their age smoke	During past school year, percent had class where taught about the effects of smoking
<u>Total</u>	60.5 (±5.1)	45.5 (±3.6)	46.5 ( <u>+</u> 4.7)
Sex			
Boy	60.1 ( <u>+</u> 5.3)	43.7 (±4.3)	46.2 ( <u>+</u> 4.3)
Girl	61.0 ( <u>+</u> 5.8)	47.2 ( <u>+</u> 3.8)	46.9 ( <u>+</u> 5.7)
Region			
Ljublijana	43.3 ( <u>+</u> 6.1)	29.0 (±6.4)	30.8 ( <u>+</u> 5.2)
East	65.3 ( <u>+</u> 7.8)	52.1 ( <u>+</u> 5.6)	52.7 ( <u>+</u> 6.3)
West	62.8 (±9.6)	44.9 ( <u>+</u> 6.8)	46.2 (±10.3)

## Cessation

Almost half (41,6%) of current smokers desire to stop, and 68,5% of current smokers tried to stop in last year (TABLE 3). Less than half (46,6%) of students received help or advice to stop smoking.

Table 3: Cessation, SLOVENIA, GYTS, 2002/03

Category	Current Smokers					
	Percent desire to stop	Percent tried to stop this year	Received Help/Advice to Stop Smoking			
<u>Total</u>	41.6 (±4.2)	68.5 ( <u>+</u> 2.4)	46.6 ( <u>+</u> 3.3)			
<u>Sex</u>						
Boy	42.8 (±5.2)	66.3 ( <u>+</u> 3.4)	50.5 (±6.0)			
Girl	40.8 (±6.9)	69.4 (±4.9)	44.4 (±4.7)			
Region						
Ljublijana	37.0 ( <u>+</u> 8.2)	66.2 ( <u>+</u> 3.3)	41.6 (±6.7)			
East	41.4 (±6.6)	69.5 (±3.6)	47.9 (±3.2)			
West	44.7 (±6.3)	68.2 ( <u>+</u> 4.8)	47.2 (±8.9)			

# Environmental tobacco smoke exposure

### At home

Current smokers were significantly more (84,8%) than never smokers (52,2%) exposed to tobacco smoke from others in their homes: from fathers (47,6% vs. 29,5%); from mothers (42,9% vs. 23,6%); from brothers and sisters (38,6% vs.11,0%); from best friends (44,2% vs. 6,3%) and from others (21,8% vs. 47,9%). These differences held by gender and region for all comparisons (TABLE 4A). Girls who currently smoke (46,3%) were significantly more than boys (38,1%) to be exposed to smoke from mothers.

Table 4A: Environmental Tobacco Smoke, SLOVENIA, GYTS, 2002/03

Cat ego ry	Exposed to stheir home	smoke in	Exposed to from father home		Exposed to from mother home		Exposed to from sister, their home	/brother in	Exposed to from best for their home		Exposed to from others home	
	Never	Current	Never	Current	Never	Current	Never	Current	Never	Current	Never	Current
	Smokers	Smokers	Smokers	Smokers	Smokers	Smokers	Smokers	Smokers	Smokers	Smokers	Smokers	Smokers
Tot	52.2	84.8	29.5	47.6	23.6	42.9	11.0	38.6	6.3	44.2	47.9	71.8
al	( <u>+</u> 3.0)	( <u>+</u> 2.8)	( <u>+</u> 3.1	( <u>+</u> 3.1)	( <u>+</u> 3.2)	( <u>+</u> 2.5)	( <u>+</u> 2.6)	( <u>+</u> 2.8)	( <u>+</u> 1.4)	( <u>+</u> 6.2)	( <u>+</u> 3.3)	( <u>+</u> 3.0)
Sex												
Bo	53.1	81.6	29.5	44.8	26.6	38.1	11.9	40.1	7.7	41.9	48.2	67.4
y	( <u>+</u> 4.5)	( <u>+</u> 4.3)	( <u>+</u> 5.2)	( <u>+</u> 6.0)	( <u>+</u> 3.9)	( <u>+</u> 3.7)	( <u>+</u> 4.6)	( <u>+</u> 4.8)	( <u>+</u> 2.4)	( <u>+</u> 6.1)	( <u>+</u> 4.1)	( <u>+</u> 4.4)
Girl	51.6	86.7	29.4	49.2	21.2	46.3	10.5	38.3	5.2	46.0	48.1	75.2
	( <u>+</u> 2.8)	( <u>+</u> 4.1)	( <u>+</u> 2.9)	( <u>+</u> 3.3)	( <u>+</u> 3.9)	( <u>+</u> 3.5)	( <u>+</u> 2.8)	( <u>+</u> 3.9)	( <u>+</u> 2.2)	( <u>+</u> 7.4)	( <u>+</u> 4.0)	( <u>+</u> 4.2)
Reg ion												
Lju blij ana	51.0 ( <u>+</u> 4.3)	81.0 ( <u>+</u> 4.9)	28.1 ( <u>+</u> 3.6)	48.7 ( <u>+</u> 6.4)	24.7 ( <u>+</u> 5.7)	26.4 ( <u>+</u> 7.0)	8.9 ( <u>+</u> 2.7)	32.8 ( <u>+</u> 7.7)	5.6 ( <u>+</u> 2.1)	38.7 ( <u>+</u> 8.5)	45.4 (±3.0)	69.6 ( <u>+</u> 3.3)
Eas	53.4	87.8	28.9	48.0	24.6	42.7	13.4	41.7	7.2	47.7	49.6	74.2
t	( <u>+</u> 4.8)	( <u>+</u> 3.5)	( <u>+</u> 6.8)	( <u>+</u> 5.0)	( <u>+</u> 4.6)	( <u>+</u> 3.4)	( <u>+</u> 4.9)	( <u>+</u> 4.4)	( <u>+</u> 2.2)	( <u>+</u> 10.0)	( <u>+</u> 5.7)	( <u>+</u> 4.0)
We	51.7	81.5	30.7	46.1	22.1	43.9	9.6	36.2	5.8	40.8	47.5	68.7
st	( <u>+</u> 5.1)	( <u>+</u> 4.7)	( <u>+</u> 3.6)	( <u>+</u> 3.9)	( <u>+</u> 5.6)	( <u>+</u> 3.9)	( <u>+</u> 3.8)	( <u>+</u> 4.5)	( <u>+</u> 2.6)	( <u>+</u> 7.3)	( <u>+</u> 5.3)	( <u>+</u> 6.0)

# At public places

Current smokers (92,4%) were significantly more than never smokers (84,3%) exposed to smoke in public places; a difference that held by gender and in Ljubljana (TABLE 4B). Girls who never smoked (84,1%) were significantly more to be exposed to smoke than boys. Never smokers (84,3%) were significantly more likely that current smokers (41,9%) to think smoking should be banned from public places; a difference that held for gender and region. Never smokers (58,8%) were significantly more likely than current smokers (41,6%) to think smoke from others is harmful for them; difference that held by gender and in the west in east region of Slovenia.

Table 4B: Environmental Tobacco Smoke, SLOVENIA, GYTS, 2002/03

Category	Exposed to smoke from others in public places		Percent think smol		Definitely think smoke from others is harmful to them	
	Never Smokers	Current Smokers	Never Smokers	Current Smokers	Never Smokers	Current Smokers
<u>Total</u>	84.1 ( <u>+</u> 1.7)	92.4 ( <u>+</u> 3.2)	84.3 ( <u>+</u> 3.0)	41.9 ( <u>+</u> 3.8)	58.8 ( <u>+</u> 4.0)	41.6 ( <u>+</u> 4.0)
<u>Sex</u>						
Boy	80.9 (±2.9)	88.1 ( <u>+</u> 5.4)	83.9 (±3.3)	43.7 (±5.4)	58.4 ( <u>+</u> 4.5)	42.2 (±5.4)
Girl	86.6 ( <u>+</u> 2.2)	95.1 ( <u>+</u> 2.6)	84.1 ( <u>+</u> 3.3)	40.2 ( <u>+</u> 4.2)	58.9 ( <u>+</u> 4.9)	40.7 ( <u>+</u> 3.8)
Region						
Ljublijana	86.3 ( <u>+</u> 3.9)	95.3 ( <u>+</u> 2.7)	85.5 ( <u>+</u> 4.4)	37.8 ( <u>+</u> 7.5)	55.0 ( <u>+</u> 6.0)	45.0 ( <u>+</u> 4.7)
East	82.7 ( <u>+</u> 2.1)	82.61 ( <u>+</u> 5.7)	82.6 ( <u>+</u> 5.7)	42.6 ( <u>+</u> 5.8)	56.6 ( <u>+</u> 7.1)	38.6 ( <u>+</u> 5.8)
West	84.4 ( <u>+</u> 3.2)	84.4 ( <u>+</u> 3.2)	85.5 ( <u>+</u> 4.1)	43.3 ( <u>+</u> 6.8)	62.8 ( <u>+</u> 6.1)	45.4 ( <u>+</u> 6.6)

# Knowledge and attitudes

Almost one fourth of never smokers (23,0%) and 18,1% of current smokers think boys who smoke have more friends (TABLE 5). The percentage who think girls who smoke have more friends is significantly lower than among never smokers (15%). The percentage of current smokers who think boys and girls who smoke are more attractive than those who don't is significantly higher than for never smokers.

Table 5: Knowledge and Attitudes, SLOVENIA, GYTS, 2002

Category	Think boys who smoke have more friends				Think smoking make more attractive	s boys look	Think smoking makes attractive	Think smoking makes girls look more attractive	
	Never Smokers KAPNS_Q 24 Table 57	Current Smokers KAPCS_Q2 4 Table 58	Never Smokers KAPNS_Q25 Table 59	Current Smokers KAPCS_Q25 Table 60	Never Smokers KAPNS_Q27 Table 63	Current Smokers KAPCS_Q27 Table 64	Never Smokers KAPNS_Q28 Table 65	Current Smokers KAPCS_Q28 Table 66	
<u>Total</u>	23.0 (±2.9)	18.1 ( <u>+</u> 4.3)	15.8 ( <u>+</u> 2.4)	13.7 ( <u>+</u> 3.4)	7.0 ( <u>+</u> 2.0)	13.1 ( <u>+</u> 2.9))	5.0 ( <u>+</u> 1.3)	11.3 ( <u>+</u> 2.3)	
<u>Sex</u>									
Boy	18.5 ( <u>+</u> 3.5)	15.8 ( <u>+</u> 6.2)	14.6 ( <u>+</u> 3.7)	12.7 ( <u>+</u> 5.6)	6.9 ( <u>+</u> 2.1)	10.6 ( <u>+</u> 3.5)	5.9 ( <u>+</u> 1.8)	12.9 ( <u>+</u> 2.9)	
Girl	25.8 ( <u>+</u> 4.1)	18.7 ( <u>+</u> 4.8)	15.9 ( <u>+</u> 3.7)	13.8 ( <u>+</u> 2.9)	6.9 ( <u>+</u> 3.0)	14.3 ( <u>+</u> 4.8)	4.1 ( <u>+</u> 2.3)	9.7 ( <u>+</u> 3.7)	
Region									
Ljublijana	19.1 ( <u>+</u> 5.1)	15.3 ( <u>+</u> 3.3)	12.8 ( <u>+</u> 3.7)	9.7 ( <u>+</u> 3.2)	4.2 ( <u>+</u> 1.8)	9.5 ( <u>+</u> 3.7)	4.2 ( <u>+</u> 2.3)	7.5 ( <u>+</u> 2.9)	
East	26.8 ( <u>+</u> 5.3)	19.8 ( <u>+</u> 8.0)	20.6 (±4.4)	16.2 ( <u>+</u> 6.5)	8.4 ( <u>+</u> 4.5)	14.2 ( <u>+</u> 5.1)	6.1 ( <u>+</u> 2.6)	13.1 ( <u>+</u> 3.9)	
West	21.0	16.7 ( <u>+</u> 3.5)	12.4 ( <u>+</u> 3.8)	11.4 ( <u>+</u> 2.3)	6.9 ( <u>+</u> 1.9)	13.3 ( <u>+</u> 3.8)	4.3 ( <u>+</u> 1.3)	10.1 ( <u>+</u> 3.4)	

(<u>+</u>4.0)

# Media and advertising

## Anti-tobacco messages

Over 60 percent of students have seen anti-smoking media message on television (65,6%), at the cinema (61,5%); and almost half have seen anti-smoking message in newspaper or magazines (52,5%), on billboards (51,3%) and on posters (50,6%) (TABLE 6A). Over 40 percents have heard anti-smoking messages in the radio (41,6%). And, 57,6% saw anti-smoking messages at the sport events. Exposure to anti-smoking media message on TV, radio and cinema was significantly lower in Ljubljana than in other regions.

Table 6A: Media and Advertising, SLOVENIA, GYTS, 2002

Category	Percent Saw Anti- Smoking Media Messages on Television MEDIA_Q59 Table 120	Percent Heard Anti- Smoking Media Messages on Radio MEDIA_Q6 0 Table 121	Percent Saw Anti- Smoking Media Messages on Billboards MEDIA_Q61 Table 122	Percent Saw Anti- Smokin g Media Messag es on Posters MEDIA _Q62 Table 123	Percent Saw Anti-Smoking Media Messages in Newspapers or Magazines MEDIA_Q63 Table 124	Percent Saw Anti-Smoking Media Messages at the Cinema MEDIA_Q64 Table 125	Percent Saw Anti-Smoking Media Messages at Sports Events, Fairs, Concerts or Community Events MEDIA_Q65 Table 36
<u>Total</u>	65.6 ( <u>+</u> 2.1)	41.6 ( <u>+</u> 2.5)	51.3 ( <u>+</u> 2.2)	50.6 ( <u>+</u> 2.5)	52.5 ( <u>+</u> 1.9)	61.5 (±4.6))	57.6 ( <u>+</u> 1.9)
<u>Sex</u>							
Boy	66.2 ( <u>+</u> 2.7)	43.5 ( <u>+</u> 3.1)	52.3 ( <u>+</u> 2.7)	50.1 ( <u>+</u> 2.4)	50.6 ( <u>+</u> 2.7)	61.2 ( <u>+</u> 5.1)	58.4 ( <u>+</u> 2.7)
Girl	64.8( <u>+</u> 2.5)	39.4 ( <u>+</u> 3.4)	50.6 ( <u>+</u> 3.5)	51.0 ( <u>+</u> 3.5)	53.8 ( <u>+</u> 2.7)	61.6 ( <u>+</u> 6.2)	57.0 ( <u>+</u> 2.8)
Region							
Ljublijana	56.9 ( <u>+</u> 3.9)	30.6 ( <u>+</u> 4.7)	52.9 ( <u>+</u> 4.5)	49.9 ( <u>+</u> 3.6)	47.5 ( <u>+</u> 4.6)	45.2 ( <u>+</u> 6.0)	55.2 ( <u>+</u> 3.7)
East	68.5 ( <u>+</u> 3.9)	46.1 ( <u>+</u> 4.1)	53.4 ( <u>+</u> 3.1)	52.8 ( <u>+</u> 4.2)	55.0 ( <u>+</u> 3.1)	69.0 ( <u>+</u> 7.8)	59.1 ( <u>+</u> 3.4)
West	66.0 ( <u>+</u> 2.0)	40.6 ( <u>+</u> 3.1)	47.8 ( <u>+</u> 4.0)	47.9 ( <u>+</u> 4.0)	51.6 (±2.8)	56.9 ( <u>+</u> 5.2)	56.7 ( <u>+</u> 2.12.1)

Table 6B: Media and Advertising, SLOVENIA, GYTS, 2002

Category	Percent Saw Pro- Tobacco Messages on Television MEDIA_Q68 Table 117	Percent Saw Pro- Tobacco Messages on Billboards MEDIA_Q69 Table 28	Percent Saw Pro- Tobacco Messages on Newspapers/Mag azines MEDIA_Q70 Table 29	Percent Saw Pro- Tobacco Messages at Sporting Events MEDIA_Q71 Table 126	Percent Saw Pro- Tobacco Messages at Cinema MEDIA_Q72 Table 127	Percent Saw Pro- Tobacco Messages at Community Events/Social Gatherings MEDIA_Q73 Table 129
<u>Total</u>	44.8 ( <u>+</u> 2.3)	53.8 ( <u>+</u> 2.1)	59.5 ( <u>+</u> 1.8)	51.1 ( <u>+</u> 2.2)	39.3 ( <u>+</u> 2.1)	41.0 ( <u>+</u> 2.4)
<u>Sex</u>						
Boy	48.1 ( <u>+</u> 2.8)	55.1 ( <u>+</u> 2.8)	58.1 ( <u>+</u> 2.2)	54.4 ( <u>+</u> 2.7)	40.9 ( <u>+</u> 2.5)	41.2 ( <u>+</u> 2.3)
Girl	40.8 (±2.4)	52.4 (±3.0)	60.4 (±2.3)	48.1 (±2.9)	37.1 (±3.0)	40.4 (±3.2)
Region						
Ljublijana	41.5 ( <u>+</u> 2.7)	66.1 ( <u>+</u> 2.2)	62.9 ( <u>+</u> 3.2)	53.0 ( <u>+</u> 2.8)	42.0 ( <u>+</u> 2.2)	45.4 ( <u>+</u> 3.1)
East	45.8 ( <u>+</u> 4.3)	49.6 ( <u>+</u> 3.5)	58.8 ( <u>+</u> 3.1)	49.7 ( <u>+</u> 3.6)	36.5 ( <u>+</u> 2.9)	39.0 ( <u>+</u> 3.8)
West	45.1 ( <u>+</u> 2.5)	53.3 ( <u>+</u> 2.9)	58.8 ( <u>+</u> 2.2)	52.3 ( <u>+</u> 3.5)	42.0 ( <u>+</u> 4.1)	41.7 ( <u>+</u> 4.3)

## Pro-tobacco messages

Almost half of students saw pro-tobacco messages in newspaper and magazines (59,5%); on billboards (53,8%) or at sports events (51,1%) (TABLE 6B). Exposure to pro-tobacco messages on billboard was significantly higher in Ljubljana (66,1%) than other regions. Boys (54,4%) were significantly more likely than girls (48,1%) to see pro-tobacco messages at sport events. Almost four in ten students saw pro-tobacco messages on TV (44,8%); at the social events (41,0%) or at the cinema (39,3%). Boys were significantly more likely than girls to see pro-tobacco messages on TV.

Current smokers (29,3%) were significantly more than never smokers (14,1%) to have an object with cigarette brand logo on it.; difference that held by gender and region (TABLE 6C).

Current smokers (16,1%) were significantly more likely than never smokers (4,7%) to have been offered free cigarettes by tobacco company representative; a difference that held by gender and region.

## Access and availability

Almost one-tenth current smokers (8,6%) usually smoke at home (TABLE 7). More than half of current smokers (64,6%) purchased cigarettes in a store, and 93,0% of current smokers bought cigarettes and was not refused because of their age, significantly more girls (96,2%) than boys (85,5%).

	•	

Category	Percent Current Smokers who Usually Smoke at Home ACCESSCS_Q39A Table 15	Percent Current Smokers who Purchased Cigarettes in a Store ACCESS_Q12 Table 16	Percent Current Smokers Who Bought Cigarettes in a Store Who Were Not Refused Because of Their Age ACCESS_Q1218 Table 17
Total	8.6 ( <u>+</u> 2.4)	64.6 ( <u>+</u> 5.7)	93.0 ( <u>+</u> 2.8)
Sex			
Boy	8.4 ( <u>±</u> 3.8)	67.3 ( <u>+</u> 4.9)	88.5 ( <u>+</u> 4.6)
Girl	9.0 ( <u>+</u> 2.6)	62.5 ( <u>+</u> 7.5)	96.2 ( <u>+</u> 2.9)
Region			
Ljublijana	5.0 (±2.3)	67.4 ( <u>+</u> 9.7)	94.9 ( <u>+</u> 1.7)
East	9.6 ( <u>+</u> 3.9)	65.7 ( <u>+</u> 9.0)	93.3 (±4.2)
West	9.0 ( <u>+</u> 3.9)	60.6 ( <u>+</u> 7.9)	91.0 ( <u>+</u> 6.2)

<sup>\* &</sup>lt; 35 cases in the denominator

## Discussion, Conclusions, and Recommendations

#### Tobacco use

Tobacco smoking is not only the behaviour of adult people, more and more is in use among children. Children, young people are still growing up – physically and emotionally and socially, and the harm of tobacco smoke is even more unpredictable.

The results of this survey show us that almost one-third (28,5%) among 13-15 years old children in Slovenia are current smokers, 26,2% had initiated to smoke before age of 10 and almost two-third –66,4% had ever smoked cigarettes. There are 15% of 13-15 years old reported that they always felt like having a cigarette first time in the morning. Almost one-third never smokers indicated that are likely to initiate smoking during the next year, significantly more likely girls than boys.

### Cessation

There were 41,6% current smoker that desire to stop and 68,5% current smokers tried to stop in last year. Only half of them received help.

## Environmental tobacco exposure

Exposure of young people to tobacco smoke is harmful. The students were exposed to tobacco smoke at home from closest relatives and at public places. Current smokers more (84,8%) and also half of never smokers (52,2%) were exposed to tobacco smoke at home and 92,4% of current smokers and 84,1% of never smokers, significantly more girls never smokers (86,6%) than boys (80,9%) were exposed to smoke in public places. Never smokers (84,3%) were significantly more likely that current smokers (41,9%) to think smoking should be banned from public places; a difference that held for gender and region.

# Knowledge and attitudes

The percentage of current smokers (11,3%) who think boys and girls who smoke are

more attractive than those who don't is significantly higher than for never smoker and almost one fourth of never smokers (23,0%) and 18,1% of current smokers think boys who smoke have more friends, but percentage of never smokers (15,8%) who think girls who smoke have more friends is significantly lower.

Never smokers (58,8%) were significantly more likely than current smokers (41,6%) to think smoke from others is harmful for them; difference that held by gender and in the west in east region of Slovenia.

### School curriculum

During the past school year 60,5% of students had classes where danger of smoking was taught and significantly less in ljubljana region (43,3%). Less than half (45,5%) had classes that discussed about reasons why people their age smoke.

### Media and advertising

Over 60% of students have seen anti-smoking media message on television and 52,5% of them in newspaper or magazines, but also almost half of students (53,8%) saw protobacco messages in newspaper and magazines. Boys were significantly more likely than girls see pro-tobacco messages on TV and at sports events.

Exposure to anti-smoking media message on TV, radio and cinema was significantly lower in Ljubljana than in other regions. In Ljubljana specially exposure to pro-tobacco messages on billboards (53,8%) was significantly higher.

### Access and availability

In Slovenia restrictive legislation on Tobacco Use has been introduced in 1996: prohibition of sale of tobacco products to persons under the age of 15. More than half of current smokers (64,6%) purchased cigarettes in a store, and 93,0% of current smokers bought cigarettes and was not refused because of their age, significantly more girls (96,2%) than boys (85,5%). Almost one-tenth current smokers (8,6%) usually smoke at home.

## Conclusions and recommendations

It is well known that tobacco industry for each smoker who quit need another one. Tobacco use among young people continues to rise as the tobacco industry promotes its products to a new generation.

As the results show also in Slovenia there are quite high number of smokers among the young generation. The results on prevalence of smoking, environmental tobacco smoke exposure, access to tobacco products, knowledge and attitudes of youngsters toward cigarette smoking, role of media and advertising on young people and school curricula and policy should be used for further investigation and control strategies.

## Recommendations for further strategies:

- -school based educational interventions and school policy
- -health education on cigarette smoking done by school nurse during the health check up
- -peer based interventions at schools or in a local community
- -youth oriented cessation programmes, while almost all cessation programmes has focused on adult
- -changing the environment for youth to grew up- non smoking environment should be role model for children

-media campaigns - youth orientated anti-tobacco advertising campaign -control on implementation of tobacco legislation

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